

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
WO 2005/079316 A3

- (51) International Patent Classification<sup>7</sup>: C07K 14/00, (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/US2005/004432
- (22) International Filing Date: 14 February 2005 (14.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/545,446 18 February 2004 (18.02.2004) US
- (71) Applicant (for all designated States except US): MERCK & CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): UEBELE, Victor, N. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). CONNOLLY, Thomas, M. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).
- (74) Common Representative: MERCK & CO., INC.; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- (88) Date of publication of the international search report: 26 January 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/079316 A3

(54) Title: NUCLEIC ACID MOLECULES ENCODING NOVEL MURINE LOW-VOLTAGE ACTIVATED CALCIUM CHANNEL PROTEINS, DESIGNATED-ALPHA 1H, ENCODED PROTEINS AND METHODS OF USE THEREOF

(57) Abstract: Disclosed herein are novel nucleic acid molecules encoding murine low-voltage activated calcium channel proteins, designated -  $\alpha$ 1H, encoded proteins, vectors, host cells transformed therewith, as well as pharmaceutical compositions. Methods of using any of the foregoing, e.g., methods for screening for candidate agonists or antagonists utilizing the novel protein isoforms are also disclosed.